SLOCUM ALLOTMENT MANAGEMENT PLAN

ENVIRONMENTAL ASSESSMENT OR-025-04-37

Bureau of Land Management Burns District Office 28910 Hwy 20 West Hines, Oregon 97738

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SLOCUM ALLOTMENT MANAGEMENT PLAN ENVIRONMENTAL ASSESSMENT

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CHAPTER I. INTRODUCTION: PURPOSE OF AND NEED FOR ACTION

A. Introduction

This Environmental Assessment (EA) is being completed to analyze grazing management for the Slocum Allotment. The Slocum Allotment is located approximately 37 miles east-southeast of Burns, Oregon (Appendix A). A detailed map of the Slocum Allotment is provided in Appendix B.

B. <u>Purpose</u>

This EA analyzes a range of alternatives including a proposed action and no action to determine grazing management for the Slocum Allotment. The Slocum Evaluation, completed on January 22, 2004, by a Bureau of Land Management (BLM) interdisciplinary team, determined that present range condition does not meet the standards for rangeland health nor does management conform to the guidelines for rangeland management. Due to the encroachment of medusahead rye on public land, and inability of the BLM to control this noxious weed within the State of Oregon, public land in a portion of this allotment is in a downward trend in range condition. Medusahead rye is a noxious annual grass that is originally from the Mediterranean area and has no natural enemies in this area. It has expanded in this area due to the incidence of fire, grazing animals, birds, and off-highway vehicles. It will outcompete native vegetation due to its early growth and mechanisms for preventing growth of native species. Total authorized use for the allotment prior to the evaluation was 863 AUMs with 300 AUMs for public land. Calculated livestock carrying capacity is 687 AUMs for the entire allotment. The permittee has sprayed medusahead rye on his private land and planted species which will compete with medusahead rye to maintain carrying capacity on his land. A graze/defer rotation grazing management system was also recommended in the evaluation. The allotment evaluation recommended that the management category be changed from a "maintain" to an "improve" category allotment due to the invasion of medusahead rye in critical mule deer winter range. An improve category allotment is one which has several concerns that need attention over the next evaluation period.

C. Need

The need for changing grazing management on the Slocum Allotment is as described under the purpose above and to attain allotment objectives which are:

- 1. Manage for an upward trend in the mid to late seral fair condition mountain big sagebrush Sandberg's bluegrass-mountain big sagebrush/bluebunch wheatgrass community/complexes (Appendix C). Trend will be measured by the frequency of occurrence of Idaho fescue and bluebunch wheatgrass as compared with current ground cover. Photo analysis will provide a qualitative determination.
- 2. Manage for an upward trend in the mid to late seral fair condition low sagebrush/Sandberg's bluegrass-rigid sagebrush/bluegrass community complexes (Appendix C). Trend will be measured by the frequency of occurrence of Idaho fescue and bluebunch wheatgrass as compared with current ground cover. Photo analysis will provide a qualitative determination.
- 3. Manage for a stable trend in the mid to late seral good condition western juniper/mountain big sagebrush/bluebunch wheatgrass-mountain big sagebrush/Idaho fescue community complexes (Appendix C). Trend will be measured by the frequency of occurrence of Idaho fescue and bluebunch wheatgrass as compared with current ground cover. Photo analysis will provide a qualitative determination.

The management analyzed in this document is tiered to and in conformance with the Three Rivers Resource Management Plan, Record of Decision, and Rangeland Program Summary of 1992, and in conformance with Federal and State Standards and Guidelines for Rangeland Health.

CHAPTER II: ALTERNATIVES INCLUDING THE PROPOSED ACTION

A. <u>Proposed Alternative - Two-Pasture Graze/Defer Rotation</u>

This alternative implements a graze/defer rotational grazing system as shown in the table below. A graze/defer rotational grazing system meets rangeland standards and guides by allowing key forage species an opportunity to complete their reproductive cycle. This management would provide for changing the timing of grazing which would also allow for plant root development and maintain or improve the health of key forage plant species.

Pasture A will be used at the permittee's discretion due to the negligible amount of public land within the pasture.

One additional trend monitoring plot will be placed in Pasture B to monitor medusahead rye encroachment. Neither Pasture B nor Pasture C will be used 2 years in a row during the timeframe of May 5 through June 25. The current grazing season for the Slocum Allotment is April 1 to August 31. The recommended grazing season is April 15 to August 31 with the flexibility to be April 1 to September 15 when climatic conditions warrant the extended season of use. These conditions are:

- A 20 percent increase over normal precipitation by March 15
- Growing season temperatures cause accelerated plant growth by March 15
- Continued adequate growing season moisture

However, the stocking level would remain at the level shown in the table below. See Appendix D for the grazing plan schematic. Pasture move dates for Pastures B and C will be reported to the BLM, within 5 days after moving from the pasture, to allow for accurate utilization monitoring of these two pastures. Actual use will be reported, as numbers of livestock and dates when the livestock move into and out of the individual pastures, within 15 days of livestock leaving BLM pastures. Future stocking levels will be based on actual use reports and utilization monitoring.

Table 1: Grazing Season Rotation

PERMITTEE	PASTURE	YEAR	DATES
Don Opie	В	1	25 days between
			04/15 and 06/30
	С	1	66 days between
			07/01 and 08/31
	В	2	25 days between
			07/01 and 08/31
	С	2	66 days between
			04/15 and 06/30

Table 2: Livestock Use

Permittee	Current Permitted Active Use AUMs	Suspended Nonuse	Recommended Active Use AUMs	Exchange of Use	Recommended Total Use
Don Opie	300	0	300	563	863

B. <u>Alternative B - No Action</u>

The no action alternative does not make any changes to the present grazing system. This alternative would not meet BLM Standards and Guides or allotment objectives. The present grazing management is a modified graze/defer rotation which had timing, pasture use, and rotation determined by the permittee. The permittee did not communicate this rotation or the timing of moves to the BLM and we were unable to monitor the grazing for utilization or for accurate actual use.

The current grazing system is April 1 to August 31; however, on most years livestock were not turned out until around April 15, which was as described above in Table 1. The stocking level was at 863 AUMs of which 300 AUMs were on BLM land. During this time a fire burned a portion of the allotment and included both BLM and private lands. The private land was seeded to improve the forage and to slow the invasion of medusahead rye. The listed management for the allotment is in Table 2.

PERMITTEE	PASTURE	YEAR	DATES
Don Opie	A	1	04/15 - 05/30
_	В	1	05/31 - 06/24
	С	1	06/25 - 08/31
	A	2	07/17 - 08/31
	В	2	04/15 - 05/10
	С	2	05/11 - 07/16
	A	3	06/26 - 08/10
	В	3	08/11 - 08/31
	C	3	04/15 - 06/25

Table 3: Previous Listed Grazing Management

CHAPTER III: DESCRIPTION OF THE AFFECTED ENVIRONMENT

The following critical elements of the human environment and other potential concerns were considered and determined not known to be affected nor impacted by the proposed action or alternatives and, therefore, will not be discussed further in this EA:

Adverse Energy Impact
Air Quality
Areas of Critical Environmental Concern
Floodplains
Hazardous Materials
Minority or Economically Depressed Populations
Paleontology
Prime Farmlands
Riparian Areas
Special Status Species Flora or Fauna

Water Quality (drinking/ground water)
Wild and Free-Roaming Horses
Wild and Scenic Rivers
Wilderness
Wilderness Study Areas

The critical elements of the human environment which may be affected by the proposed action and/or alternatives are:

Cultural Heritage Migratory Birds Noxious Weeds

A. Critical Elements

1. Cultural Heritage and American Indian Concerns

No cultural resources inventory has been completed in this allotment. Based on inventory in the general area, this allotment is likely to contain numerous small lithic scatters of low significance. Additional, potentially higher information sites are likely to be found near water sources and in upland juniper/sagebrush steppe areas where edible plants may be found.

It is possible that Burns Paiute and other Indian Tribes use the public land in this allotment to collect edible and medicinal plants. However, there is no specific information regarding this use.

2. Noxious Weeds

There are areas of medusahead rye in the allotment. BLM currently has very limited tools to effectively manage medusahead rye on BLM-administered land in Oregon. In areas with heavy clay soils, medusahead rye can and will outcompete mid and late seral native species, as well as a competitive introduced species such as crested wheatgrass.

Medusahead rye may have been brought in to this area by wildlife, livestock or vehicular traffic. The plant has spread due to the repeated occurrence of wildfire which allows this fall sprouting plant the ability to outcompete perennial native vegetation due to its early growth form, matt forming characteristics, and its ability to reduce competition due to its chemical composition.

3. Migratory Birds

Migratory birds are known to use the project area for nesting, foraging, and resting as they pass through on their yearly migrations.

B. Noncritical Elements

1. Range

a. Vegetation

The major vegetation types in this allotment are primarily a western juniper/mountain big sagebrush/bluebunch wheatgrass—mountain big sagebrush/Idaho fescue complex, a low sagebrush/Sandberg's bluegrass-rigid sagebrush/Sandberg's bluegrass complex, a low sagebrush/Sandberg's bluegrass—mountain big sagebrush/bluegrass complex, and basin big sagebrush/Sandberg's bluegrass (Appendix C.)

b. Soils

The following soil associations were determined to be present on public land during the Ecological Site Inventory:

- Merlin-Ateron Rubble land complex with 2 to 20 percent slopes with a Mountain Claypan shallow or a Mountain very shallow soil in a 12 to 16-inch precipitation zone on hills and tablelands with varied low and big sagebrush with an Idaho fescue component. Soils are very stony clay loams, very cobbly loams or a fragmental soil.
- Westbutte Lambring rock outcrop with 20 to 60 percent slopes with Mountain South or Mountain North moderately deep to very deep soils in a 12 to 16-inch precipitation zone on canyon sides, hillsides, and escarpments with varied low and big sagebrush with an Idaho fescue component. Soils are a very cobbly loam, a very stony loam or unweathered bedrock.
- Risley rock outcrop complex with 5 to 20 percent slopes with clayey 9 to 12-inch soil on miscellaneous land types with moderately deep soils with Wyoming big sagebrush and bluebunch wheatgrass sites. Soils are a very stony loam or unweathered bedrock.
- Merlin Observation 2 to 20 percent slopes with a shallow to moderately deep Mountain Claypan or a mountain very shallow soil on uplands and mountain plateaus with varied low and big sagebrush with an Idaho fescue component. Soils are a very cobbly loam or a very stony loam.

Livestock Management c.

Livestock management is at present a three-pasture graze/defer rotational system from April 1 to August 31 yearly as indicated in the table below. Use supervision and utilization surveys documented the system was not followed by the permittee. The permittee implemented a modified graze/defer management but did not inform BLM of moves or times through actual use reports or other means. Due to the changes made by the permittee and not communicated to us we were not always able to complete utilization transects and other rangeland monitoring in a timely manner.

Permittee Year Pasture Dates 04/01 - 04/30Don Opie A 1 05/01 - 06/30В 1 \mathbf{C} 1 07/01 - 08/312 05/01 - 06/30A 2 07/01 - 08/31В $\overline{\mathbf{C}}$ 2 04/01 - 04/30A 3 07/01 - 08/3104/01 - 04/303 В \mathbf{C} 3 05/01 - 06/30

Table 4: Present Listed Management

d. Present Permitted Use in the Allotment is as Follows:

Permittee	Active Livestock AUMs	Suspended Nonuse	Total AUMs Specified for Livestock Grazing	Exchange of Use	Total Use
Don Opie	300	0	300	563	863

Table 5: Permitted Use

2. Wildlife

The Slocum Allotment supports a diversity of wildlife. There are deer, elk, pronghorn antelope, coyote, and black-tailed jackrabbit, along with many other species. The area is considered as critical winter mule deer range.

3. Recreation and Visual Resources

Recreational opportunities within the area are in the form of big game hunting for deer and antelope, along with some upland bird hunting for sage-grouse and quail. The allotment is within a Visual Resource Management Class IV where changes

to the landscape are permitted.

4. Socioeconomics

The permittee depends on grazing on Federal land as a part of their livestock operation. This helps to increase the weight gains of owned livestock which go to market. The associated weight gains help the profitability of their operation.

CHAPTER IV: ENVIRONMENTAL CONSEQUENCES AND MITIGATIONS

A. <u>Proposed Action – A Two-Pasture Graze/Defer Rotation</u>

1. Critical Elements

a. Cultural Heritage and American Indian Concerns

The area of affect has not been surveyed for cultural resources at this time. Project areas will be inventoried for archaeological sites and paleontological localities prior to project implementation. Because there is not an adequate inventory in this allotment, inventory of livestock congregation areas, and depositional landforms is a high priority.

b. Noxious Weeds

The Slocum Allotment is in an area where medusahead rye is rapidly expanding. Fires in 1985 and 2002 may have been the opening for the infestation of medusahead rye. Management actions that encourage mid to late seral vegetation and good to excellent condition rangeland and key species will be helpful in allowing native species to occupy niches and slowing down potential movement of medusahead rye into other areas. The vectors for spreading medusahead rye are vehicular traffic, livestock, and wildlife.

Medusahead rye is increasing its cover within the allotment every year. Following wildfire, BLM should seed any portion of public land possible to assist in management of medusahead rye. Upon lifting of the Oregon State injunction on herbicides, BLM should utilize appropriate herbicides on public land to control medusahead rye.

c. Migratory Birds

Migratory bird use in the area could increase as improved native habitat replaces introduced noxious weed species.

2. Noncritical Elements

a. Range

(1) Vegetation

The two-pasture graze/defer rotation would help in maintaining the present native vegetation; however, with any disturbance and/or without control measures being taken, medusahead rye will continue to spread.

(2) Soils

Soil conditions would be maintained by the vegetation increase due to use during times when the plants are not actively growing. Areas encroached on by medusahead rye could continue to experience accelerated erosion by both wind and water until control measures are taken on public land in the area.

(3) Livestock Management

Livestock management would be a two-pasture graze/defer rotation which could improve the overall condition and vigor of the native and seeded plants. The improvement in vigor and condition of the plants could increase forage value on the allotment with associated weight gains for the livestock and could help maintain native vegetation for a longer period. Management for this allotment will include notification of BLM when livestock are moved from Pastures B or C to allow for timely utilization monitoring. Pastures B or C will not be utilized 2 years in a row during the time of May 5 to June 25. One additional trend monitoring plot will be established in Pasture B to monitor the native vegetation and the encroachment of medusahead rye. Pasture A will be used at the permittee's discretion due to the negligible amount of public land within the pasture.

b. Wildlife

The anticipated upland improvement would be beneficial to species that utilize good quality upland habitat. Upland improvement for browse species would be beneficial to mule deer for winter range.

c. Recreation and Visual Resources

There would be a no change in the visual aspects of the area. Hunting opportunities would be little affected by the proposed action.

d. Socioeconomics

This alternative would not change the socioeconomics of the area.

B. No Action

1. Critical Elements

a. Cultural Heritage and American Indian Concerns

An increase in the noxious weed medusahead rye and the increased erosion could destroy the soil layers used in understanding relationships of artifacts and uncover artifacts exposing them to possible damage or loss.

b. Noxious Weeds

The Slocum Allotment is in an area where medusahead rye is rapidly expanding. Fires in 1985 and 2002 may have been the opening for the infestation of medusahead rye. It is increasing its cover within the allotment every year. With the present management medusahead rye may accelerate its rapid spread. Following further wildfire BLM should seed any portion of public land possible to decrease the spread of medusahead rye. Upon lifting of the Oregon State injunction on herbicides BLM should utilize appropriate herbicides on public land to control medusahead rye.

c. Migratory Birds

Migratory bird use in the area could decrease as native habitat continues toward nonnative perennial species.

2. Noncritical Elements

a. Range

(1) Vegetation

The current grazing management may provide for maintaining the present native vegetation; however, the infestation of medusahead rye will continue to spread without control measures being taken. The inability to monitor the grazing management has reduced our

ability to prioritize areas for noxious weed control and for determining the effectiveness of the current grazing management.

(2) Soils

Medusahead rye encroachment will continue to increase erosion by both wind and water until control measures are taken on public land in the area.

(3) Livestock Management

Livestock management would be an unknown for the term of the permit as the permittee has not communicated his management to the BLM.

b. Wildlife

Wildlife habitat and associated wildlife use in the area would decrease as the noxious annual weed medusahead rye increased.

c. Recreation and Visual Resources

There would be change in the visual aspects of the area due to medusahead rye encroachment which would replace native perennial species. Hunting opportunities could be reduced due to habitat loss.

d. Socioeconomics

This alternative would not change the socioeconomics of the area.

C. Cumulative Impacts

1. Proposed Alternative – Two-Pasture Graze/Defer Rotation System

Medusahead rye would continue to increase and reduce native perennial vegetation in disturbed areas. In current perennial plant communities with improved grazing management this would occur at a slower rate. With current management the loss of current native perennial vegetation would continue with increased soil erosion from wind and water which would further reduce native vegetation. Increases in medusahead rye would increase the fire frequency and size of wildfires in the area which could further accelerate soil erosion and loss of native perennial vegetation.

2. No Action Alternative

Medusahead rye could continue to increase and reduce native perennial vegetation. With present management the loss of native perennial vegetation could rapidly increase soil erosion from wind and water which could further reduce native vegetation. Medusahead rye increase could increase the fire frequency and size of wildfires in the area which could further increase soil erosion and loss of native perennial vegetation.

CHAPTER V: PERSONS AND AGENCIES CONSULTED

Oregon Department of Fish and Wildlife

CHAPTER VI: PARTICIPATING STAFF

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CHAPTER VII: APPENDICES

- A. General Location Map
- B. Allotment Map
- C. Dominant Vegetation
- D. Proposed Action Grazing Management